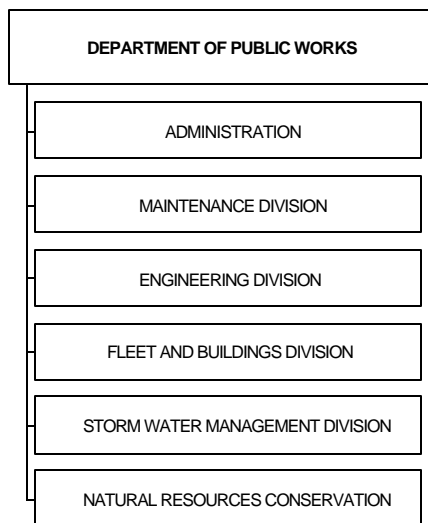


# Public Works

**Mission.** The mission of the Public Works Department is to provide for the design, construction, maintenance, and cleaning of the City's streets, roads, sidewalks, and traffic control devices; maintenance and custodial services for City buildings; and natural resource conservation.

**Overview.** The Department is organized into six divisions: Administration, Engineering, Fleet and Buildings, Maintenance, Storm Water Management, and Natural Resources. The Engineering Division is responsible for planning, designing,



administering, and overseeing the construction of freeways, bridges, streets, traffic signals, sewers, water mains, storm drains, drainage, park, and railway projects, including privately funded projects for public use. Activities include project preplanning and initiation, design review, right of way and utility coordination, estimating, contract administration, project financing, and engineering advice for the Capital Improvement Program and City departments. The Division issues permits for utility street cuts, driveway and sidewalk construction, and performs inspections of contractors' work. The Division also administers the street lighting system and investigates traffic concerns.

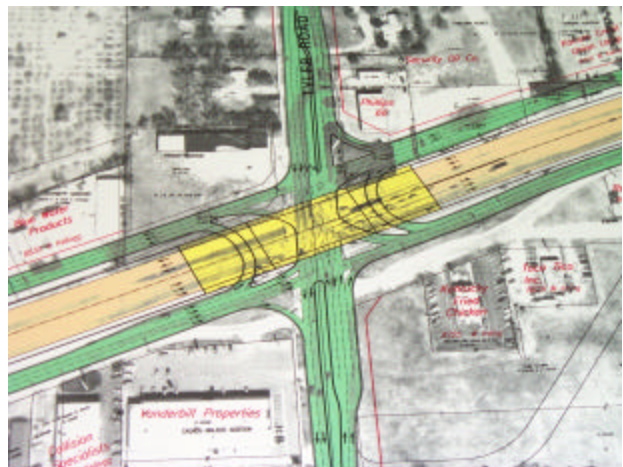
Construction contracts exceeded \$50 million in 1999, including over \$20 million for streets, sewers, water lines, and other public improvements for newly developing areas of the City, in addition to major reconstruction projects. Some major projects administered by the Engineering Division in 1999 included 13<sup>th</sup> Street, 29<sup>th</sup> Street, Meridian, the Douglas Avenue Bridge, the Vest Pocket Park, the Douglas Streetscape, the Murdock Bridge, the Wichita Drainage Canal improvements, and completion of the Kellogg and Oliver freeway intersection.



*Seneca Street north of Kellogg under construction. Upon completion, Seneca will serve as the gateway to Wichita's Museum District.*

In 1999, 164 design contracts for more than \$10 million were awarded, including several bridges, River Corridor Improvements, Maple, Hydraulic, 25<sup>th</sup> Street North, Rock Road, and major intersection improvements in northeast Wichita. Design work continues for future railroad overpasses and the Kellogg freeway, scheduled for construction to begin in 2001.

The 2001-2010 Capital Improvement Program (CIP) projects includes construction of the Kellogg Freeway from K-96 on the east to Maize Road on the west by 2007. The very aggressive construction schedule assumes construction will begin on Tyler/Maize in 2001, Woodlawn in 2002, Rock Road in 2003, and Webb and Greenwich in 2005. Senior Engineering staff will provide project planning and support.



*The preliminary design drawing for the intersection of West Kellogg and Tyler Road.*

Engineering is responsible for the planning and design of traffic control devices such as signalized intersections, traffic signs, and pavement markings. Engineering also supports the Planning Commission on development issues, monitors traffic, and

responds to citizen traffic concerns. In addition, Traffic Engineering coordinates the \$3 million annual street lighting program, provided contractually through KG&E.

Building Services (Fleet and Buildings Division) provides custodial, maintenance, and repair services of City-owned buildings including City Hall, Central Maintenance Facility, Mid-America All-Indian Center, Library, Art Museum, Wichita/Sedgwick County Historical Museum, Century II, Expo Hall, Health Department, Lawrence-Dumont Stadium, park buildings, Botanica, and the Farm & Art Market.



*The Hotel at Old Town parking garage is one of 260 buildings maintained by Building Services.*

The proposed budget addresses major maintenance needs for the City's buildings. An allocation of \$1.2 million each year in 2000 and in 2001, and \$400,000 in 2002 is included for major repairs that cannot be addressed with routine maintenance. Repair needs such as foundation repairs, roof replacements, and structural refurbishing will be identified and prioritized for the most effective use of the total \$4 million allocation (including the \$1.2 million allocated in 1999). The City's 260 buildings include community and recreation centers, park shelter buildings and restrooms, fire stations, police substations, maintenance buildings, and libraries.

Increasing custodial and maintenance responsibilities for more than 260 buildings have challenged the capacity of existing staff and resources. Additional resources were added in 1999, with two new custodial and three new maintenance positions, including specialized electrical, heating & air conditioning, and plumbing technicians.

Selected Performance Measures				
	1998	1999	2000	2001
Maint. costs per sq. ft.	\$0.60	\$0.41	\$0.50	\$0.55
Custodial costs per sq. ft.	\$1.02	\$1.48	\$1.50	\$1.65

Building Services also participates in the management, specification writing, and administration of building construction and major building maintenance projects, working with all City departments.

In 1999, Building Services participated in eighteen projects with contracts totaling more than \$30 million. Some of the major 1999 projects included the Hotel at Old Town Parking Garage, the Wichita Transit Storage Administration and Maintenance (SAM) Facility, College Hill Swimming Pool, and the new Fire Station #18. Major 2000 projects managed include the City Hall Court/Atrium Remodel, Ralph Wulz Tennis Center Remodel, Wichita Art Museum Expansion, Northeast Soccer Complex, Naftzger Park, and Farm and Art Market improvements. Historically, change orders on projects managed by Building Services have averaged less than two percent of project costs.

The Building Services Division oversees the Cooperative Labor Program that transports and supervises inmates from the Winfield Correctional Facility. Work performed by the inmate crews in a downtown building rehabilitation project was instrumental in Wichita being selected for the 1998 Crown Community Award. A similar program, the City Work Program, allows non-violent offenders from the City's Municipal Court system the option of supervised community service work in-lieu of paying the imposed fine.

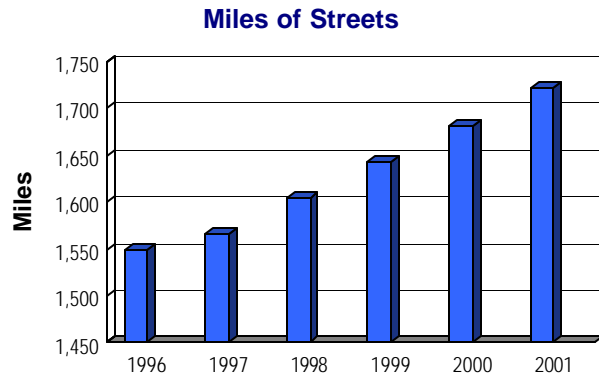
The Maintenance Division is responsible for maintaining curb-to-curb infrastructure, including 1,681 miles of streets, 253 vehicular bridges, 26 pedestrian bridges, 370 signalized intersections, 170 pedestrian/school signals, and 100,000 traffic signs. The Division is also responsible for street cleaning, snow & ice removal, and landfill resource management.



*Pothole patching crew.*

The Pavement Management System (PMS) is a computerized system providing an inventory of streets and the condition of the streets. The PMS is a decision-making tool used to determine the most cost-effective application of street maintenance resources. Streets are rated once

every two to three years and the PMS system compiles the pavement condition data and assigns a Pavement Quality Index (PQI) number between 10 (new condition) and 0. Streets with a PQI less than seven are substandard from a maintenance standpoint. Currently, 21 percent of Wichita's streets are rated substandard.



The number of miles of City streets has grown in recent years with annexations and newly paved streets. More than 120 miles of streets were added from 1997 to 2000, with an additional 40 miles projected to be added in 2001. The added mileage includes 21 miles of dirt streets and over 55 miles of substandard asphalt streets.



*Asphalt street repair.*

Maintenance of the increasing miles of streets is addressed with additional budget and resources. The \$1.2 million annual enhancement to the Contract Maintenance Program budget, begun in 1997, has been extended through 2001, bringing the annual allocation for major contracted maintenance to \$5.35 million. In 2002, the enhancement amount is \$1 million.

An annual allocation of \$200,000 is included for contracted street repairs in newly annexed areas. The photos on the right illustrate the condition of many streets prior to annexation, and the improvement that residents enjoy after being annexed into the City of Wichita.

Additional street maintenance equipment includes the upgrade of

two dump trucks to pothole patch trucks that are capable of providing hot asphalt for longer lasting pothole patches and for helping with larger asphalt repairs. A new concrete mixer has been ordered to enhance productivity of existing maintenance crews. Finally, two new asphalt-paving machines are added to enhance productivity when doing major street repairs. The addition of the two machines will allow one asphalt paver to be stationed at each of the three City maintenance facilities (Central Maintenance Facility (CMF), Northeast Substation, and West Substation), reducing the time required to transport equipment throughout the City and increasing the availability of major repair equipment. The machines will allow asphalt to be applied up to ten feet in width.

Selected Performance Measures				
	1998	1999	2000	2001
Potholes patched	39,103	44,904	35,000	35,000
Permanent pavement repairs (sq. yds.)	41,493	25,776	40,000	40,000



*Fatigue cracking on a street east of Wichita.*



*The same street shortly after being annexed.*

Downtown and Old Town maintenance efforts are bolstered by the addition of a riding sweeper to enhance employee productivity when cleaning sidewalks, parking lots, and other pedestrian areas.

In 2001, an additional five-person maintenance crew is added to maintain the new Douglas Avenue Streetscape and the Vest



Pocket Park, as well as enhancing maintenance in the Old Town area. The 2000 Revised budget includes the purchase of equipment for the new maintenance crew, including a truck, trailer, brick saw, and other small equipment.

Street Cleaning uses a fleet of eight mechanical street sweepers for routine sweeping of downtown, arterial and residential streets.

Residential streets are swept during the daytime, while arterials and highways are swept in the evenings and at night, to minimize inconvenience to citizens.

Selected Performance Measures				
Number of cycles	1998	1999	2000	2001
Residential sweepings	2.4	2.4	3.0	3.0
Arterial sweepings	10.0	12.8	8.0	8.0
Downtown sweepings	32.0	30.0	30.0	30.0

Traffic Control Maintenance maintains traffic signals, signs, pavement markings, and pedestrian crossings. Beginning in the 2001 budget, the Traffic section will begin a program to systematically replace 200 traffic signal heads and 120 pedestrian signal heads each year, which tend to become brittle over time.

Replacing the heads will also simplify the replacement of signal lenses and bulbs, since the newer heads are less prone to breakage when handled.

Thermoplastic marking equipment is added in 2001, allowing crews to use liquified plastic to mark intersections and crosswalks.

Thermoplastic marking lasts five to seven times longer than standard reflective paint, depending on pavement condition and traffic levels, increasing the maintenance interval for remarking intersections and crosswalks.



*Traffic signal repair.*



*A City crew cleans a tree grate in Old Town.*

The Maintenance Division coordinates the City's emergency response and maintenance needs during disasters that affect the public right-of-ways. Activities include snow and ice removal during winter storms, response to conditions resulting from flooding, and damage caused by high winds.

In 1999, the Maintenance Division spent approximately 25 percent of the year involved in two storm clean-up efforts. First, following the tornado of May 1999, City crews were used for two months to clean up storm debris. In early December, heavy snow broke many tree limbs, and crews spent the entire months of December and January cleaning up limbs from public and private property.

Although these clean-up efforts provided a valuable service to Wichitans, crews were diverted from routine maintenance work.

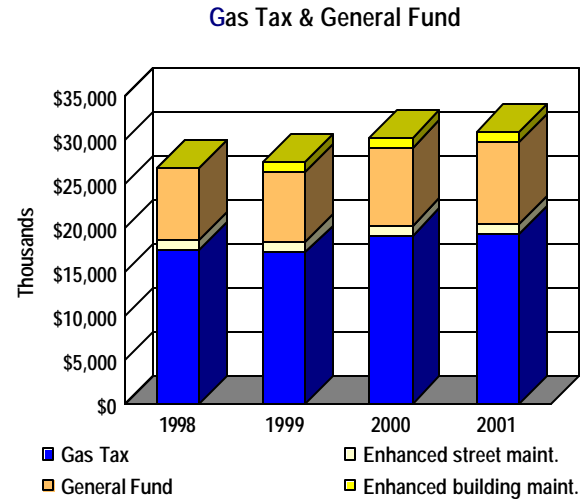
**Finance and Operations.** The Department's street (curb-to-curb) functions are funded with the City's share of gas tax revenues collected by the State. Gas tax funded activities include street maintenance, street cleaning, traffic maintenance, snow and ice control, engineering, and the street portion of the capital investment maintenance program.

All activities beyond curb-to-curb projects are paid from the General Fund, including department administration; natural resource conservation; design review for non right-of-way projects; building services; street lighting; and the public buildings portion of the capital investment maintenance program.

The following table summarizes all Public Works expenditures, for general fund, gas tax funds, and all other funding sources.

Public Works Total Expenditures			
	1999	2000	2001
General Fund	7,932,632	8,543,980	9,097,780
Gas Tax	17,112,345	18,314,650	18,844,710
Enhanced street maintenance	1,200,000	1,200,000	1,000,000
Enhanced building maintenance	1,200,000	1,200,000	400,000
Annexation supplemental	200,000	200,000	200,000
Landfill Fund	10,941,589	18,025,010	9,595,990
State Office Building	1,027,699	1,262,420	1,386,970
Storm Water Utility	5,251,390	10,998,620	6,230,940
Fleet & Buildings ISF	8,795,001	8,584,020	8,187,580
Flood Control	1,205,296	1,390,110	1,407,850
Environmental Trust	0	100,000	100,000
<b>TOTAL</b>	<b>54,867,951</b>	<b>69,820,810</b>	<b>56,453,821</b>

In addition to the General Fund and Gas Tax funded activities, the Public Works Department is responsible for the operation, closure, and post-closure maintenance of Brooks Landfill; Storm Water Utility maintenance and capital projects; maintenance of the City-County Flood Control project (Big Ditch); fleet maintenance; and maintenance of the State Office Building. The Public Works Department's total budget for all responsibilities assigned totals over \$60 million.



Public Works Budget Summary					
	1999 Actual	2000 Adopted	2000 Revised	2001 Adopted	2002 Approved
Personal Services	9,213,998	11,099,630	10,281,480	11,602,560	12,150,000
Contractual Services	13,168,138	13,201,480	12,951,990	13,018,780	12,813,070
Commodities	1,761,829	2,751,360	2,772,610	2,913,500	2,959,200
Capital Outlay	652,046	252,550	332,550	397,650	252,700
Other	248,966	0	520,000	10,000	0
<b>Total Public Works Expenditures</b>	<b>25,044,976</b>	<b>27,305,020</b>	<b>26,858,630</b>	<b>27,942,490</b>	<b>28,174,970</b>
<b>Position Summary</b>					
Total full-time	311	319	319	324	324
Total part-time	48	45	45	45	45
Total FTE	332.83	339.33	339.33	344.33	344.33